

AMENDMENT

Please enter the following amendments without prejudice or disclaimer.

In the Claims:

Please replace the presently pending claims 1, 42, 48, 51 and 54-58 with the following claims:

61
1. (Five times amended) A method for modifying the polysaccharide/saccharide composition of a plant or plant organ, wherein said method comprises growing a transgenic plant containing a vector or recombinant expression construct containing a nucleotide sequence encoding a microbial endo-glucanase operably linked to a regulatory or leader sequence under conditions wherein said glucanase is expressed and the polysaccharide/saccharide composition of said plant or plant organ is modified by the expressed glucanase and said regulatory sequence is selected from the group consisting of

- a) a regulatory sequence that directs expression of said microbial endo-glucanase-encoding nucleotide sequence at a selected stage of development or maturity of the transgenic plant or plant organ;
- b) a regulatory sequence comprising a CaMV 35S promoter; and
- c) a regulatory sequence that directs tissue-specific expression of said microbial endo-glucanase-encoding nucleotide sequence in a plant; and wherein said leader sequence targets the expressed endo-glucanase to polysaccharide/saccharide material contained in a cellular compartment or organelle.

42. (Twice Amended) The method of claim 1, wherein said transgenic plant further contains at least one expression cassette which contains a nucleotide sequence encoding a second microbial enzyme that acts upon degradation products resulting from the action of the expressed glucanase.

48. (Twice Amended) The method of claim 42, wherein the second microbial enzyme is selected from the group consisting of a maltase, an α -dextrinase, an α -1,6-glucosidase, a glucose isomerase and an invertase.

64 51. (Amended) The method of claim 1, wherein said transgenic plant is selected from the group consisting of tomato, potato, corn, cassava, carrot, lettuce, strawberry and tobacco.

65 54. (Four times amended) A recombinant DNA expression cassette comprising a regulatory sequence operably linked to a nucleotide sequence encoding a microbial endo-glucanase which regulatory sequence is selected from the group consisting of

- a) a regulatory sequence that directs expression of said microbial endo-glucanase-encoding nucleotide sequence at a selected stage of development or maturity of the transgenic plant or plant organ;
- b) a regulatory sequence comprising a CaMV 35S promoter; and
- c) a regulatory sequence that directs tissue-specific expression of said enzyme-encoding nucleotide sequence in a plant.

66 55. (Amended) A vector comprising the expression cassette according to claim 54.

67 56. (Thrice amended) A stably transformed, transgenic plant, wherein said plant contains a stably integrated nucleotide sequence comprising a regulatory sequence operably linked to a sequence encoding a microbial endo-glucanase resulting from the introduction of the expression cassette according to claim 54.

68 57. (Amended) A bacterial strain wherein said bacterial strain contains a vector according to claim 55.

69 58. (Four times amended) A stably transformed, transgenic plant or plant organ, wherein said plant or plant organ contains endo-glucanase modified polysaccharide/saccharide material contained in a cellular compartment or organelle, said plant or plant organ being made by the method of claim 1.
